

In re: Gillette *et al.*
Serial No.: 10/643,610
Filed: August 19, 2003
Page 10 of 15

REMARKS

Claims 1-33, 40-53, 56 and 57 are pending. Claims 1-31 are withdrawn from consideration. Claims 32-33, 40-53 and 56-57 stand rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement. Claims 32, 40, 42-46, 48-50 and 52-53 stand rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,326,612 to Goulait ("Goulait"). Claims 32, 40-53 and 56 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Goulait in view of U.S. Patent No. 6,503,855 to Menzies et al. ("Menzies"). Claim 33 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Goulait in view of U.S. Patent No. 6,217,693 to Pelham ("Pelham") or U.S. Patent No. 6,342,285 to Shepard et al. ("Shepard"). Claims 33 and 57 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Goulait in view of Menzies and further in view of Pelham or Shepard.

Applicants respectfully traverse the §102, §103 and §112 rejections for at least the reasons set forth below.

In re: Gillette *et al.*
Serial No.: 10/643,610
Filed: August 19, 2003
Page 11 of 15

§112 Rejections Are Overcome

The Action states that Applicants' "specification is silent regarding not bonding fibers to a supporting layer" and that Applicants' specification "does not mention a supporting layer." (Action, Page 2). Applicants respectfully disagree.

Applicants have discovered a novel method of forming loop structures from spunlaced fiber that can be used as the female component of a hook and loop fastening system. According to this novel method, loop structures are formed *only* by entangling the fibers of a spunlaced fabric, without requiring any bonding whatsoever, either to other fibers or to a layer of material. As clearly set forth on page 5 of Applicants' specification, it is stated that Applicants' invention "includes forming a spunlaced fabric having a plurality of loop structures from a plurality of non-interbonded fibers." In the very same sentence, Applicants' state that the spunlaced fabric can be *optionally* bonded to a backing layer. Clearly, Applicants' female component requires no backing/support layer of any type.

Notwithstanding the above, and to expedite prosecution of the present case, Applicants have amended independent Claims 32 and 56 to remove the recitation of a supporting layer. As such, the rejections under 35 U.S.C. §102 are overcome.

In re: Gillette *et al.*
Serial No.: 10/643,610
Filed: August 19, 2003
Page 12 of 15

§102 and §103 Rejections Are Overcome

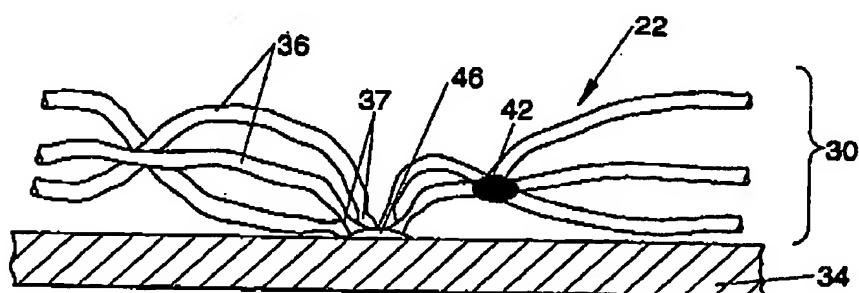
The loop structures of Applicants' female component of a hook and loop fastening system are formed *only* by entangling the fibers of a spunlaced fabric, without requiring any bonding whatsoever, either to other fibers or to a layer of material. Accordingly, Applicants' independent Claim 32 recites a loop component for use in a hook and loop fastening system, comprising:

a spunlaced nonwoven fabric having a plurality of *unbonded* loop structures formed *only* by entangling a plurality of *non-bonded and non-interbonded fibers* in a fibrous web of material, wherein the plurality of loop structures define a landing zone for receiving hooks from a male component of a hook and loop fastener, *wherein the loop structures in the landing zone contain no interbonded fibers*, wherein between about two percent and about twenty-five percent (2%-25%) of a surface area of the landing zone is bonded in one or more patterns to reduce fiber fuzzing and pull out caused by hooks engaging with and disengaging from the loop structures of the loop component, and wherein loop structures remaining in the landing zone contain no interbonded fibers.

Applicants' independent Claim 56 contains similar recitations.

The nonwoven female component described in Goulait requires bonded fibers to form loop structures. The fibers described by Goulait are bonded either by thermally bonding the fibers together and/or by bonding the fibers to a backing layer. Either way, Goulait *requires* bonding to produce loop structures. Without bonding, Goulait would have only loose fibers.

Fig. 4A of Goulait is set forth below:



In re: Gillette *et al.*
Serial No.: 10/643,610
Filed: August 19, 2003
Page 13 of 15

Fig. 4A from Goulait clearly illustrates an inter-fiber bond 42 and bonding 46 to a backing layer 34.

The Action cites Col. 8, Lines 53-63 of Goulait as disclosing that "fibers may be held together by interlocking or bonding." (Action, Page 12). However, the Action fails to read what the rest of the cited passage teaches. The entire passage cited by the Action is set forth below:

The nonwoven web 30 used in the female component 22 may be any suitable nonwoven material. The term "nonwoven", as used herein, refers to fabrics made of fibers held together by interlocking or bonding which are not woven, knitted, felted, or the like. The, nonwoven web referred to herein may be a structure that is comprised of fibers that are initially substantially unbonded which are subsequently bonded to the backing 34. The nonwoven web referred to herein also includes webs of fibers that have some degree of inter-fiber bonding before such webs are bonded to the backing 34. (Goulait, Col. 8, Lines 53-63; emphasis added).

The above passages make it clear that Goulait requires some sort of bonding, either interfiber bonding or bonding of fibers to a backing layer, or both.

Moreover, at Col. 12, Lines 33-49, Goulait states:

The amount of inter-fiber bonding between the fibers 36 of the nonwoven web 30 is important to the female component 22 of the present invention. The bond sites created by the bonds 42 between the fibers 36 in the nonwoven web 30 will tend to reduce any spreading of fibers 36 to accommodate the hooks 28. In addition, an excessive number of inter-fiber bonds 42 in the nonwoven web 30 will interfere with the entry of the hooks 28.

The quantity of inter-fiber bonding depends on the type of nonwoven material used when the female component 22 is manufactured. The nonwoven web 30 used could be initially unbonded and then later bonded during the process of manufacturing the female component 22. For instance, the female component 22 could be made by bonding an unbonded layer of loose fibers to a backing material, in which case there may be no inter-fiber bonds 42. (Goulait, Col. 12, Lines 33-49)

Clearly, Goulait forms loop structures by inter-fiber bonding and/or by bonding fibers to a backing layer. Without either bonding to a backing layer or inter-fiber bonding, the fibers of Goulait cannot form loop structures that can serve as the female component of a hook and loop fastening system. Goulait specifically states this (*i.e.*, that unbonded or partially bonded fibers will be incapable of entangling and holding the hooks of a hook component). (Goulait,

In re: Gillette *et al.*
Serial No.: 10/643,610
Filed: August 19, 2003
Page 14 of 15

Col. 10, Lines 56-61). Clearly, to the ordinary artisan, there is substantial difference between the claimed invention (*i.e.*, a spunlaced fabric wherein all loop structures are formed only by entangling fibers) and the primary reference, Goulait.

Nothing in Goulait describes or suggests *only* entangling the fibers of a spunlaced fabric to produce loop structures for a female component of a hook and loop fastening system without some sort of fiber bonding. Moreover, nothing in Goulait describes bonding between about two percent and about twenty-five percent (2%-25%) of the surface area of the landing zone in one or more patterns to reduce fiber fuzzing and pull out caused by hooks engaging with and disengaging from the loop structures of the loop component, and wherein loop structures remaining in the landing zone contain no interbonded fibers and contain no fibers bonded to a supporting layer.

The secondary reference, Menzies, describes a laminated composite suitable for use in medical products such as tapes and wraps. The composite includes a first nonwoven fiber layer, an elastic layer, a melt blown adhesive fiber layer, and a second nonwoven fiber layer. The non-woven fiber layer(s) and/or the scrim layer form suitable loops for a hook and loop fastening system. Menzies fails to teach or suggest a spunlaced fabric having a plurality of loop structures formed *only* by entangling loose fibers in a fibrous web of material and without bonding the fibers together and/or bonding the fibers to a backing layer. Moreover, no clear and particular evidence has been set forth as to why Menzies would lead one skilled in the art to remove the inter-fiber bonds and/or the bonds of fibers to the backing layer in the Goulait female component, especially in light of the fact that Goulait specifically states that unbonded or partially bonded fibers will be incapable of entangling and holding the hooks of a hook component. (Goulait, Col. 10, Lines 56-61).

Nothing in Menzies, Pelham or Shepard describes bonding between about two percent and about twenty-five percent (2%-25%) of the surface area of the landing zone in one or more patterns to reduce fiber fuzzing and pull out caused by hooks engaging with and disengaging from the loop structures of a loop component, and wherein loop structures remaining in the landing zone contain *no interbonded fibers and no bonds to a backing layer.*

In re: Gillette et al.
Serial No.: 10/643,610
Filed: August 19, 2003
Page 15 of 15

Accordingly, Applicants respectfully request withdrawal of the present rejections under 35 U.S.C. §102, §103 and §112, and respectfully submit that this application is in condition for allowance, which action is respectfully requested. Any additional fees believed to be due in connection with this paper may be charged to our Deposit Account No. 50-0220.

Respectfully submitted,

Needham J. Boddie, II
Registration No. 40,519

USPTO Customer No. 20792
Myers Bigel Sibley & Sajovec, P.A.
Post Office Box 37428
Raleigh, North Carolina 27627
Telephone: (919) 854-1400
Facsimile: (919) 854-1401
457741

CERTIFICATION OF FACSIMILE TRANSMISSION UNDER 37 CFR § 1.8

I hereby certify that this correspondence is being transmitted by facsimile to the U.S. Patent and Trademark Office on August 31, 2005 via Facsimile number 571-273-8300.

Erin A. Campion